

## REMARKS

Claims 1-40 are pending in the present Application. Claims 1, 8, 9, 15, 16, and 20 have been amended. Claims 21-40 have been newly added. Applicants have noted and carefully studied the Examiner's comments and the cited art. Applicants respectfully traverse the rejections and request reconsideration. Applicants believe that the present Application is now in condition for allowance, which prompt and favorable action is respectfully requested.

### Amended Claims

Claims 1, 8, 9, 15, 16 and 20 have been amended to more accurately claim the subject matter that Applicants regard as the invention. Claim 20 has also been amended to correct a typographical error, namely, by replacing "software applications from the *resident* storage" with "*resident* software applications from the storage." Applicants respectfully submit that because such amendment was made to correct a correct typographical error, that such an amendment does not constitute a narrowing amendment.

Applicants submit that the new language in the amended claims do not include new matter. Applicants submit that such claims are allowable at least because of Applicants' arguments highlighting the explicit and inherent differences between Applicants' claimed subject matter and that disclosed by the cited reference as well as that known to those of ordinary skill in the art, and therefore that the claimed subject matter therein is neither anticipated, nor is it obvious in light of such reference or in light of that known to those of ordinary skill in the art. As such, Applicants also request the removal of the pending rejections and the allowance of the claim.

Claims 1-5, 7-17, 19 and 20 (103a Rejections)

The Office Action has rejected claims 1-5, 7-17, 19 and 20 under 35 U.S.C. 103(a) as being allegedly unpatentable over Cowan in view of Barber et al.

Cowan

Applicants submit that Cowan discloses a system for wireless software upgrades with version control, (title). Such system is designed to operate such that if “the mobile device [is determined to] not currently have the operating software version identified by the host computer, the mobile device prompts the host computer to download the [upgraded] version stored in the host computer.” (col. 2, lns. 48-51). If, on the other hand, the mobile device is determined to have the software version identified by the host computer, “the mobile device simply continues to operate using the operating software currently stored therein. In this manner, the system does not needlessly spend time replacing the operating software in the mobile devices with the same software,” (col. 2, lns. 48-55).

As such, Applicants submit that Cowan discloses a system that performs a upgrade of an old operating system a new version of the same. As noted by the most recent Office Action, Cowan is absent discussion regarding the deletion of an application component while maintaining application-associated data. Further, Cowan appears to generally be directed to maintaining or increasing current memory storage demand, where the code of a current version of a software application (e.g., operating system) is upgraded with the code of a new and different version of the same software. In addition, Applicants note that Cowan discloses the installation of upgraded software, not previously deleted software.

Barber et al.

Applicants submit that Barber et al. discloses a method and apparatus for non-volatile data storage in radio telephones and the like, (title). Such system is described as containing three

components. A first component, an “integrated circuit that operates in response to fixed programming, ... typically is stored in ... (“ROM”), which retains its contents ... when power is removed.” (col. 1, lns. 25-30). A second component, a RAM portion for “data, such as signal samples and intermediate results of various calculations.” (col. 1, lns. 31-32), that “... do not need to be remembered ... so this [RAM] volatility is acceptable,” (col. 1, lns. 40-42). The third component, a permanently powered RAM, EEPROM or sectored flash memory, (col. 1, ln. 41 – col. 2, ln. 4; col. 2, lns. 8-14; col. 2, lns. 28-33), for storing “an intermediate type of information for which volatility is not acceptable but that must be changed from time to time. Such [as] volume settings, speed-dial numbers, accumulated-air-time data, and so forth, (col. 1, lns. 44-52).

Barber et al. continues on to disclose problems associated with several different types of memory configurations (e.g., power RAM chips, EEPROMs or conventional ROM) if used for this third-component type of data storage, (col. 1, ln. 52 – col. 2, ln. 4). Applicants submit that Barber et al.’s solution is simply directed to the use of “a flash memory of the ‘sectored’ type,” (col. 2, lns. 8-34), for storing such changeable data. In addition, Barber et al. also discloses the upgrading of program code using this sectored-type flash memory, (col. 4, lns. 27-37). As such, Applicants submit that Barber et al. is simply directed to a system for maintaining certain related dynamic information in a non-volatile read/write memory known as sectored flash memory. Applicants also submit that Barber et al. is further directed to the deleting/replacement/upgrading of software (col. 4, lns. 27-37), but makes no mention as to whether such upgrades do, or do not, involve the use of different data structures and formats as its application-associated data, and as such, Barber et al. does not appear to suggest the maintaining of application-associated data during such upgrades. Further, Barber et al. appears to be focused on the installation of upgraded software and is otherwise apparently absent discussion related to the installation of previously deleted software.

**Acknowledgement Of What Cowan Doesn't Disclose, Teach or Suggest**

Applicants acknowledge the Office Actions' statement that "Cowan fails to explicitly teach that upon storage capacity being need by the at least one wireless device, the wireless device selectively deletes one or more application components of the one or more resident software applications from the storage without loss of the application associated data."

**Independent Claims 1, 8, 16 and 20**

Applicants further submit that neither Cowan (see above), nor Barber et al. disclose, teach or suggest, whether considered alone, or in combination, at least Applicants' claimed subject matter including, inter alia,

"... upon storage capacity being needed by the at least one wireless device ... deleting one or more application components of the one or more resident software applications from the storage without loss of the application-associated data, and upon the deleted one or more application components being needed ... the wireless device selectively ... installing the ... one or more application components ... on the wireless device,"

(claim 1, 16),

"... upon capacity being needed in the means for storing ... deleting one or more application components of the one or more resident software applications from the means for storing without loss of the application-associated data, and upon the deleted one or more application components being needed ... the wireless communication means selectively ... installing the ... one or more application components ... on the wireless communication means,"

(claim 8),

"... upon storage capacity being needed by the at least one wireless device ... deleting one or more application components of one or more resident software applications from the storage of the wireless device, the deletion occurring without loss of the application-associated data; upon the deleted one or more application components being needed ... installing at the wireless device the ... one or more application components ...,"

(claim 20),

**Cowan DOES NOT Disclose The Deletion Of An Application Based On The Need For Storage Capacity**

*Cowan Teaches Away Where It Identifies Reason For Upgrade as The Availability Of a New Software Version*

Cowan does not disclose, teach or suggest, either when considered alone, or in combination with Barber et al., at least, that “upon storage capacity being needed by the at least one wireless device the wireless device selectively deleting one or more application components of one or more resident software applications.” In fact, Cowan teaches away from such functionality where Cowan discloses that upgrades in operating software are performed in response to the detection of the presence of new and different versions of such software on a host computer, (col. 6, Ins. 9-51). More specifically, Cowan describes the upgrading of operating software as: “when a mobile terminal 36 is next rebooted, the mobile terminal 36 will detect that the host computer 30 has an upgraded version of operating software and will proceed to request that the upgraded software be downloaded.” (col. 6, Ins. 47-51). As such, Applicants submit that such deletion of an application during an upgrade of such software is performed in response to the presence of a new version of such software on a host computer, and is otherwise not based on the need for additional storage capacity.

*Cowan's Concern For Storage Capacity Occurs After Decision To Upgrade Is Made*

Further, Applicants submit that Cowan's concern for storage capacity is focused on what happens during an attempt to load upgraded software when there is not enough space to accommodate the new and different software, (col. 12, Ins. 29-59). In such a case Cowan describes two scenarios: the first results in the failure to successfully load the application due to the lack of memory, and the second results in requiring the availability of at least twice the size of the space needed for the application before attempting such a download, (col. 12, Ins. 29-59). Applicants submit that in neither of the scenarios represent the need to delete an application based on the need for storage capacity, in contrast, Cowan simply describes how the size of

available memory will affect a process that has already begun, where that process involves the loading of an new and different upgraded software application.

**Barber et al. DOES NOT Disclose The Deletion Of An Application Based On The Need For Storage Capacity**

**Barber et al. Teaches Away Where It Identifies Reason For Upgrade as The Need/Desire to Upgrade a Telephone**

Barber et al. does not disclose, teach or suggest, either when considered alone, or in combination with Cowan, at least, that “upon storage capacity being needed by the at least one wireless device the wireless device selectively deleting one or more application components of one or more resident software applications.” In fact, Barber et al. teaches away from such functionality where Barber et al. discloses that upgrades in operating software are performed in response to the need or desire to upgrade a telephone, (col. 4, lns. 28-31). More specifically, Barber et al. describes the upgrading of operating software as: “[a]lthough the programming is intended to be essentially permanent, it may be necessary or desirable to upgrade the telephone by changing that memory [containing such programming] at some point, and this can be done by rewriting the contents of that sector.” (col. 4, lns. 28-31). As such, Applicants submit that such deletion of an application during an upgrade of such software is performed in response to a need or desire to upgrade telephone software, and is otherwise not based on the need for additional storage capacity.

**Cowan Teaches Away From Deleting Application And Maintaining Associated Data No Mention of Incompatibility of Application-Associated Data Suggests No Thought of Keeping Such Data During Upgrades**

Cowan, although discusses upgrades of software, Cowan is generally absent discussion relating to application-associated data associated with such software. In fact, Applicants submit that Cowan teaches away from Applicants’ claimed subject matter by discussing the replacement of the currently running software with new and different software, without mentioning inherent

problems therein associated with application-associated data. More specifically, Applicants submit, that it is generally known by those of ordinary skill in the art that upgrading software can result in differences in the format or data structures, thus rendering a prior set of such data as unusable by the newly upgraded software. In fact, the upgrade itself may be focused on changing the format and/or data structures of the application-associated data for the purpose of improving the performance of the software. Because of the possibility of such recently upgraded software being able to utilize application-associated data stored from a previously software version, and the lack of discussion in Cowan related to this problem, Applicants submit that Cowan was not faced with such incompatibility because Cowan did not propose the keeping of such application-associated data for use with the upgraded software..

As such, Applicants respectfully submit that one of ordinary skill in the art would not, in response to reading Cowan, either alone or in combination with the cited art, attempt to save application-associated data associated with a first program (a first version of a program) for use by a second program (a later version of the same program) because such saved data has no guarantee of working with the second program.

**Data** **Barber et al. Teaches Away From Deleting Application And Maintaining Associated**  
**No Mention of Incompatibility of Application-Associated Data Suggests No Thought of**  
**Keeping Such Data During Upgrades**

Applicants submit that although Barber et al. discloses the upgrading of software located in certain sectorized flash memory, (col. 4, lns. 27-37), and the storage of changeable parameters (e.g., volume levels and speed-dial numbers) in other sectorized flash memory, (col. 4, lns. 39-47), Barber et al. does not specifically disclose the deleting of one or more software application components without loss of application-associated data. In fact, Applicants submit that Barber et al. teaches away from Applicants' claimed subject matter where Barber et al. discusses the

upgrade of current programming code with different programming code, (i.e., a new version of the same programming), without any discussion of how different versions of the same programming code, might result in incompatible application-associated data. Applicants submit that such an absence of discussion of what would otherwise be such a clear a significant concern suggests that Barber et al. did not contemplate, nor disclose, teach or suggest, such a system where programming code is deleted while the application-associated data is kept for use by a new and different set of upgraded programming code.

As such, Applicants respectfully submit that one of ordinary skill in the art would not, in response to reading Barber et al., and/or any of the other cited art, attempt to save application-associated data associated with one set of software (a first version of software) for use by a subsequent set of software (a later version of the same software) as such operational data has no guarantee of working with the new version and to otherwise predict/detect whether current application-associated data could be used would likely be prohibitively expensive and difficult to implement.

#### **Cowan DOES NOT Disclose The Re-Installing of Deleted Application Components**

Cowan does not disclose, teach or suggest, either when considered alone, or in combination with Barber et al., at least, for example, that “upon the deleted one or more application components being needed ... the wireless device selectively ... installing the ... one or more application components ... on the wireless device.” In fact, Cowan teaches away from such functionality where Cowan discloses an upgrade of software where new and different upgraded software, not previously deleted software, is installed on the device, (col. 6, lns. 9-51). More specifically, Cowan describes the upgrading of operating software as: “when a mobile terminal 36 is next rebooted, the mobile terminal 36 will detect that the host computer 30 has an upgraded version of operating software and will proceed to request that the upgraded software be



downloaded,” (col. 6, Ins. 47-51). Further, Cowan specifically emphasizes the need to not install previously installed software where Cowan states: “the system does not needlessly spend time replacing the operating software in the mobile devices with the same software,” (col. 2, Ins. 48-55). As such, Applicants submit that what is loaded onto the device is a new and different set of upgraded software, and such software is different that what was deleted from the device, and as such, Cowan does not disclose, teach or suggest Applicants’ claimed subject matter.

**Barber et al. DOES NOT Disclose The Re-Installing of Deleted Application Components**

Barber et al. does not disclose, teach or suggest, either when considered alone, or in combination with Cowan, at least, for example, that “upon the deleted one or more application components being needed ... the wireless device selectively ... installing the ... one or more application components ... on the wireless device.” In fact, Barber et al. teaches away from such functionality where Barber et al. discloses an upgrade in software where new software, not previously deleted software, is installed on the device, (col. 4, Ins. 28-31). More specifically, Barber et al. describes the upgrading of software as: “[a]lthough the programming is intended to be essentially permanent, it may be necessary or desirable to upgrade the telephone by changing that memory [containing such programming] at some point, and this can be done by rewriting the contents of that sector.” (col. 4, Ins. 28-31). As such, Applicants submit that what is loaded onto the device is a new and different upgraded set of software, and such software is something other than was deleted from the device, and as such, Barber et al. does not disclose, teach or suggest Applicants’ claimed subject matter.

**Obviousness Requirements Not Met**

Applicants note that in order for prior art references to be combined by obviousness, at a minimum, there must be a suggestion of desirability for the modification. Applicants submit that

neither Cowan nor Barber et al. disclose, teach or suggest the desirability for modification, explicit or otherwise. In addition, there must be a teaching or suggestion to make the combination and a reasonable expectation of success must be both found in the prior art, and not based on Applicants' disclosure. Further, Applicants note that the level of skill in the art cannot be relied upon to provide the suggestion to combine references. Additionally, since none of the cited references disclose, teach or suggest "... upon storage capacity being needed by the at least one wireless device ... deleting one or more application components..." or "... deleting one or more application components of the one or more resident software applications from the storage without loss of the application-associated data... ," or "upon the deleted one or more application components being needed ... the wireless device selectively ... installing the ... one or more application components ... on the wireless device," (claim 1, 16), and since none of the cited references disclose, teach or suggest "upon capacity being needed in the means for storing ... deleting one or more application components ..." or "... deleting one or more application components of the one or more resident software applications from the means for storing without loss of the application-associated data ...," or "upon the deleted one or more application components being needed ... the wireless communication means selectively ... installing the ... one or more application components ... on the wireless communication means," (claim 8), and since none of the cited references disclose, teach or suggest "upon storage capacity being needed by the at least one wireless device ... deleting one or more application components ..." or "... deleting one or more application components of one or more resident software applications from the storage of the wireless device, the deletion occurring without loss of the application-associated data... ," or " ...upon the deleted one or more application components being needed ... installing at the wireless device the ... one or more application components" (claim 20), the combination of any of the cited references cannot produce the Applicants' invention as claimed.

Further, Applicants respectfully submit that the Office Action uses improper hindsight reasoning by suggesting it would have been obvious to modify Cowan. and/or Barber et al. to achieve Applicants' claimed subject matter, where the Office Action, using impermissible hindsight, bases such arguments only upon the teaching or suggestion within Applicants' own disclosure. Applicants submit that there must be some suggestion or motivation, either in the reference itself, or in the knowledge of generally available to one of ordinary skill in the art, to modify the reference as described. Further, to the extent that the Office Action relies on a position that modifications of Cowan and/or Barber et al. to meet the claimed invention would have been within the ordinary skill of the art at the time Applicants' invention was made, because the references, and/or the knowledge of one skilled in the art, were individually known to those of skilled in the art, is not sufficient to establish a prima facie case of obviousness without some objective reason to combine the teachings of the references. Applicants submit that if one of ordinary skill in the art at the time of Applicants' invention were to read Cowan. and/or Barber et al. such a person would not be in possession of Applicants' claimed subject matter.

#### Dependent Claims 2-5 and 7

Applicants submit that for at least the reason that claims 2-5 and 7 (dependent claims) each depend from claim 1 (parent claim), and as a dependent claims therefrom, the dependent claims are allowable for at least the reasons for which the parent claim is allowable. Applicants further submit that the dependent claims are also allowable in light of the presence of novel and non-obvious elements contained therein that are not otherwise present in the parent claim.

#### Independent Claims 9, 15 and 20

Applicants direct the Examiner's attention to the arguments presented above regarding the allowability of claims Independent Claims 1, 8, 16 and 20, and submit, that for at least the reasons mentioned therein, that claims 9, 15 and 20 are also allowable. Applicants also submit

that in addition to such reasons, such claims are also allowable in light of the presence of novel and non-obvious elements contained therein that are not otherwise present in claims 1, 8, 16 and 20.

Dependent Claim 10

Applicants submit that for at least the reason that claim 10 (dependent claim) depends from claim 9 (parent claim), and as a dependent claim therefrom, the dependent claims are allowable for at least the reasons for which the parent claim is allowable. Applicants further submit that the dependent claim is also allowable in light of the presence of novel and non-obvious elements contained therein that are not otherwise present in the parent claim.

Dependent Claim 11

Applicants submit that for at least the reason that claim 11 (dependent claim) depends from claim 9 (parent claim), and as a dependent claim therefrom, the dependent claim is allowable for at least the reasons for which the parent claim is allowable. Applicants further submit that the dependent claim is also allowable in light of the presence of novel and non-obvious elements contained therein that are not otherwise present in the parent claim.

Dependent Claim 12

Applicants submit that for at least the reason that claim 12 (dependent claim) depends from claim 9 (parent claim), and as a dependent claim therefrom, the dependent claim is allowable for at least the reasons for which the parent claim is allowable. Applicants further submit that the dependent claim is also allowable in light of the presence of novel and non-obvious elements contained therein that are not otherwise present in the parent claim.

Dependent Claim 13

Applicants submit that for at least the reason that claim 13 (dependent claim) depends from claim 12 (parent claim), and as a dependent claim therefrom, the dependent claims are

allowable for at least the reasons for which the parent claim is allowable. Applicants further submit that the dependent claim is also allowable in light of the presence of novel and non-obvious elements contained therein that are not otherwise present in the parent claim.

Dependent Claim 13

Applicants submit that for at least the reason that claim 14 (dependent claim) depends from claim 9 (parent claim), and as a dependent claim therefrom, the dependent claim is allowable for at least the reasons for which the parent claim is allowable. Applicants further submit that the dependent claim is also allowable in light of the presence of novel and non-obvious elements contained therein that are not otherwise present in the parent claim.

Dependent Claims 17 and 19

Applicants submit that for at least the reason that claims 17 and 19 (dependent claims) each depend from claim 16 (parent claim), and as a dependent claims therefrom, the dependent claim is allowable for at least the reasons for which the parent claim is allowable. Applicants further submit that the dependent claim is also allowable in light of the presence of novel and non-obvious elements contained therein that are not otherwise present in the parent claim.

Claims 6 and 18 (additional 103a Rejections)

The Office Action has rejected claims 6 and 18 under 35 U.S.C. 103(a) as being allegedly unpatentable over Cowan in view of Barber et al. in view of Official Notice.

**Acknowledgement Of What Cowan (as Modified by Barber et al.) Doesn't Disclose, Teach or Suggest**

Applicants acknowledge the Office Actions' statement that "Cowan as modified by Barber ... fails to explicitly teach that the wireless terminal is a personal digital assistant."

Dependent Claims 6 and 18

Applicants submit that for at least the reason that claims 6 and 18 (dependent claims) depend from claims 1 and 16 (parent claims) respectively, and as a dependent claims therefrom, the dependent claims are allowable for at least the reasons for which the parent claims are allowable. Applicants further submit that the dependent claims are also allowable in light of the presence of novel and non-obvious elements contained therein that are not otherwise present in the parent claims.

New Claims 21-40

Applicants direct the Examiners attention to the arguments made above, particularly those arguments associated with independent claims 1, 8 16 and 20, and submit for the same, or similar reasons, that new claims 21-40 are allowable as written, and as such, Applicants respectfully request the allowance of the new claims.

## CONCLUSION

In light of the amendments contained herein, Applicants submit that the application is in condition for allowance, for which early action is requested.

Please charge any fees or overpayments that may be due with this response to Deposit Account No. 17-0026.

Respectfully submitted,

Dated: August 6, 2004

By: 

Brent A. Boyd  
Reg. No. 51,020  
(858) 651-4567

QUALCOMM Incorporated  
Attn: Patent Department  
5775 Morehouse Drive  
San Diego, California 92121-1714  
Telephone: (858) 658-5787  
Facsimile: (858) 658-2502